

Plant:

- Arabidopsis suspension cultured cell (Ler)
(May, M.J. and Leaver, C.J. (1993) PlantPhysiol. 103, 621-627)

Bacterial pathogen:

- *Pseudomonas syringae* pv. *tomato* DC3000 *avrRpm1*

Materials:

- Nunc 96-deep well plate #260252 for incubation
- 8-channel pipet (for small volume)
- 8-channel pipet (for middle volume)
- 8-channel electronic pipet (for large volume)
- 96-well plate for absorbance measuring

- Evans blue solution (1% Evans blue in water)
- Elution solution (50% Methanol, 1% SDS)
- VH medium:
 - MS
 - 3 % Sucrose
 - 0.5 mg/L NAA (naphthaleneacetic acid)
 - 0.05 mg/L 6-BAP (6-benzyl amino purine)

Bacteria Mixture:

- VH medium(hormone free) 27.5ml
- 0.5M MES(pH5.0) 2.86ml (final conc. 14.3 mM)
- Pst(OD2) 10ml (final OD0.2)

Protocol:

Aliquot 58.5 µl of suspension cells by 8-channel pipet using top cut tip
↓
Add 0.5 µl of chemicals in each well by 8-channel pipet
(We used DMSO as solvent of chemicals and it has no effect on HR cell death up to at least 0.5 %.)
↓
Mix well by hand tapping
↓
Incubate for 1 hour with occasional shaking
↓
Add 41 µl volume of Bacteria Mixture (Final volume is 100 µl)
↓
Incubate on shaker for about 20 hrs
↓
Add 5ul of Evans Blue solution (Final 1%)
↓
Incubate for 1hour with occasional shaking

↓
Add 1 ml of H₂O for washing by 8-channel electronic pipet
↓
Remove 1 ml H₂O with electronic pipet after waiting for several minutes
↓
Repeat washing 3 times
↓
Add 400 µl of Elution solution by electronic 8-channel pipet
↓
Float plate in 55 °C water bath and incubate for 20 min
↓
Aliquot 150 µl elution solution in 96-well plate
↓
Add 50 µl of samples to 150 µl elution solution in 96-well plate (4 times dilution)
↓
Measure OD₅₉₅ absorbance using plate reader

Note: Japan Patent 2008-088491
